

## HVAC Analysis Application Development

**Client:** One of the Largest Independent Suppliers of HVAC Solutions  
**Location:** USA

### Client Description

The client is a Fortune 500, full-line, global designer and manufacturer of heating, ventilating, air conditioning and refrigeration (HVAC&R) products. The company is one of the largest manufacturer and marketer of such products in USA and one of the leading companies in the HVAC&R industry internationally.

- Calculate year round energy cost considering year round weather conditions
- Give total operating cost of plant including initial capital cost and operating cost

The system involved writing extensive algorithms performing complex calculations for evaluating HVAC configurations.

### Business Need

The client wanted to create a web-based product for use by Consulting Engineers in the HVAC industry to assist in the design and specification process.

The product would create 3 different equipment configurations for a proposed HVAC installation and help engineering consultants compare the alternative HVAC system scenarios on energy costs and capital costs before recommending an optimum solution.

The client required technical assistance for developing the product based on their functional specifications. Complex calculations had to be performed for selecting the configuration.

Blue Star Infotech (BSI), with its strong domain expertise and technology expertise, was selected as their technology partner.

### Solution Offered

Leveraging on its domain knowledge, BSI was able to translate the needs of the customer into concrete requirements. The requirements gathering phase was critical for this as eliciting specifications and functionality for the product had to be looked at from an implementation perspective.

The system was divided into modules to reduce complexity and make data handling simpler. The system had following features:-

- Capturing data regarding city in which plant was located
- Capture building area, number of floors and type of building for designing of HVAC systems

### Benefits to the Client

- Leveraging domain expertise leading to rapid application development
- Development of Reusable algorithms which are scalable for more parameters
- 80% savings on contractor expenses

### TECHNOLOGY

- Windows 2000, SQL Server 2000
- C#, ASP.NET, Graphic Server for .NET
- RUP using Rational suite
- HTML, CSS, JavaScript
- XML, SOAP, Web Services

#### For more information about Blue Star Infotech:

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